Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
Inquiry Concerning the Deployment of)	GN Docket No. 16-245
Advanced Telecommunications Capability to)	
All Americans in a Reasonable and Timely)	
Fashion, and Possible Steps to Accelerate Such)	
Deployment Pursuant to Section 706 of the)	
Telecommunications Act of 1996, as Amended)	
by the Broadband Data Improvement Act)	

REPLY COMMENTS OF ADTRAN, INC.

ADTRAN, Inc. ("ADTRAN") takes this opportunity to reply to some of the comments submitted in response to the Commission's *Notice of Inquiry* regarding the Twelfth Broadband Progress Report undertaken pursuant to Section 706 of the Telecommunications Act of 1996.¹ In its comments, ADTRAN urged the Commission to ask the right questions, gather the appropriate data and undertake the proper analyses, so that the resulting Twelfth Broadband Progress Report was a thorough and objective analysis of the question specifically asked by Congress -- "whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion." In contrast, some of the other commenters appeared to be more interested in pushing their particular agendas onto the Commission in this annual assessment of broadband deployment pursuant to Section 706.

Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, GN Docket No. 16-245, FCC 16-100, released August 4, 2016 (hereafter cited as "Notice of Inquiry").

² Telecommunications Act of 1996, Section 706(b), codified at 47 U.S.C. § 1302(b).

Deere & Company ("Deere") urges the Commission to assess deployment of broadband to cropland and ranchland, in addition to connectivity to residences and schools.³ While ADTRAN agrees that broadband connectivity has become increasingly important for agricultural applications (and indeed, nearly all commercial activities), if there is connectivity to the farm or ranch, then the farmer/rancher can readily deploy their own outdoor WiFi transmitter with a range of multiple kilometers (at a cost of under \$500) to extend coverage to their cropland or ranchland. Thus, ADTRAN believes it is unnecessary for the Commission to track separately mobile broadband coverage of farmland or ranchland.

The Fiber to the Home Council Americas ("FTTH Council") in its comments urges the Commission to substitute a metric of deployment of all-fiber networks for the current speed benchmark in assessing whether "advanced telecommunications capability" is being deployed to all Americans in a reasonable and timely manner. ADTRAN certainly believes that the goal of fiber-to-the-premises, wherever economically feasible, is a laudable one. Fiber-to-the-premises provides robust and scalable broadband capabilities, with the flexibility to increase speeds through changing the electronics.

Moreover, ADTRAN believes it makes sense for the Commission to continue to track the different technologies being deployed to provide broadband services, given the different capabilities and characteristics of the different technologies.⁵ However, FTTH Council's

Deere Comments at pp. 3-6.

FTTH Council Comments at p. 10 ("The Commission should take the opportunity now to replace its existing speed benchmark with a benchmark based on whether all-fiber networks are being deployed to all Americans in a reasonable and timely fashion."). *See also*, FTTH Council Comments at p. 7 ("it is critical that the Commission move away from its reliance on a "speed" benchmark and focus instead on the extent to which all Americans have access to all-fiber networks").

The Form 477 collects some of that information, but perhaps the technology categories

suggestion of replacing the speed benchmark with a technology-specific metric would mean the Commission in the Section 706 proceedings was only tracking FTTH deployment, which would seem to be inconsistent with the statutory definition of "advanced telecommunications capability." That definition is tied to the ability to support specific services on a technology-neutral basis – "high-quality voice, data, graphics, and video telecommunications *using any technology*." Thus, ADTRAN believes the Section 706 reviews should continue to assess all technologies capable of providing "advanced telecommunications capability."

Netflix focuses its comments on data caps, complaining that they could impact its business model of selling over-the-top video. ADTRAN does not believe that such pricing issues are relevant to the broadband deployment question that Congress directed the Commission to address in these Section 706 inquiries. Moreover, as ADTRAN explained in its comments, the Commission itself suggested that data caps can be an efficient means of addressing network congestion problems when it resolved the Comcast-BitTorrent dispute. ADTRAN thus urges the Commission to reject Netflix' request to set data cap policies in this proceeding.

The Competitive Carrier Association ("CCA") also seeks to use this proceeding to

should be updated to reflect technological developments. Currently the Form 477 includes the following categories for reporting fixed broadband technologies (*Modernizing the FCC Form 477 Data Program*, 28 FCC Rcd 9887 (2013) at n. 99):

asymmetric xDSL, symmetric xDSL, other wireline (*i.e.*, all copper wire-based technologies other than DSL, and including Ethernet over copper), cable modem, optical carrier (fiber to the end user, and including Ethernet over fiber), satellite, terrestrial fixed wireless, electric power line, and all other (*i.e.*, a placeholder category for newly evolving technologies).

- ⁶ 47 U.S.C. §1302(d)(1) (emphasis added).
- Netflix Comments at pp. 4-7.
- ⁸ ADTRAN Comments at p. 16.

advocate for policies unrelated to the purposes of the Section 706 inquiry directed by Congress. Without any attempt to assess current conditions or the progress being made to deploy broadband, CCA simply urges the Commission to conclude that advanced telecommunications capabilities are not being deployed to all Americans in a reasonable and timely manner. CCA then urges the Commission to use the resulting Section 706 authority to regulate data roaming rates, reduce Business Data Services rates, and adopt spectrum and other policies to make it easier for smaller wireless carriers to compete against the large, nationwide carriers. But such highly regulatory actions to intervene in the marketplace would be inconsistent with the Section 706 directive to adopt policies that remove barriers to infrastructure investment if there is a negative finding on the pace and reasonableness of broadband deployment. Moreover, those particular issues advocated by CCA are being addressed elsewhere. The Commission need not and should not address them in this proceeding.

Finally, ADTRAN takes issue with those commenters that urge the Commission to increase the current 25/3 Mbps benchmark for assessing whether particular broadband services count as "advanced telecommunications capabilities." The National Association of Telecommunications Officers and Advisors ("NATOA") proposes an unspecified increase in the speed benchmark based on one customer usage study that showed "average download speeds of over 50 Mbps and average upload speeds of nearly 19 Mbps." However, the statutory definition of "advanced telecommunications capability" is tied to the ability to support specific services, not average usage. And as TechFreedom demonstrated in its comments, the current

⁹ CCA Comments at pp. 10-11.

¹⁰ CCA Comments at pp. 14-25.

NATOA Comments at p. 3.

25/3 Mbps benchmark is more than sufficient to support those services. 12

New America's Open Technology Institute ("OTI") urges the Commission to increase the benchmark to 50 Mbps downloads and 20 Mbps uploads. OTI asserts that "[n]otably, the purpose of this proceeding is to define what constitutes *advanced* telecommunications service in Section 706, which should be a forward-looking definition." (emphasis in original)¹³ However, Congress included a definition of "advanced telecommunications capability," and did so by reference to specific services to be supported. Futuristic services proffered as examples by OTI to justify a higher benchmark, such as virtual reality and augmented reality, are nowhere to be found on that list. Nor does that statutory definition contain any reference to the forward looking goals of the National Broadband Plan.¹⁴

The Utilities Technology Council ("UTC") also suggested an increase in the speed benchmark, proposing to raise it to 50 Mbps or higher. ¹⁵ In order to justify this higher benchmark, UTC asserts that "[u]tilities are finding that consumers are generally subscribing to broadband services of 50 mbps where utilities are offering broadband." ¹⁶ But such anecdotal and vague claims about customer subscriptions are unrelated to the statutory definition. In addition, UTC argues for an increase in the benchmark because of the multiplicity of connected devices in the home: "On average there are seven connected devices per household today." ¹⁷ However, the Sandvine study cited by UTC indicates the number of devices connected over the course of a

TechFreedom comments at pp. 8-15.

OTI Comments at p. 2.

¹⁴ *Ibid*.

UTC Comments at p. 1.

UTC Comments at p. 5.

UTC Comments at p. 6.

day, not the number of devices that are connected simultaneously.

In sum, neither UTC nor any of the other commenters have justified an increase in the

speed benchmark the Commission should use in this year's Section 706 inquiry. ADTRAN

continues to urge the Commission to undertake a thorough and unbiased assessment of the state

of broadband deployment consistent with the statutory directives of Section 706. ADTRAN

believes that such a review will reveal that while there is work still to be done with broadband

adoption and deployment across some sectors, the Commission should make a positive response

to the question of whether overall advanced telecommunications capability is being deployed to

all Americans in a reasonable and timely manner.

Respectfully submitted, ADTRAN, Inc.

By: ____/s/_

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